## THE "HALF-CONE" VAULT OF ST. STEPHEN AT GAZA\*

## HENRY MAGUIRE

THE orator Choricius is well known to art ▲ historians for his descriptions of two lost sixth-century churches in Gaza, St. Sergius and St. Stephen.<sup>1</sup> In the ekphrasis of St. Stephen the attention of scholars has focused on the literary climax of the piece, an involved account of a "novel form" of wooden vault.2 The complexity of this passage has challenged several modern writers to reconstruct the appearance of the vault, but nobody has been able to account fully for all of the clues given by the description.3 This paper offers a new solution to the puzzle which satisfies every requirement of the text, and which is also possible in the context of sixth-century ecclesiastical architecture.

Photius, when he reviewed the works of Choricius in the ninth century, noted that this orator "surpasses himself when developing descriptions and eulogies." However, Photius

- \* I am indebted to the many with whom I have discussed the reconstruction presented in this paper, especially Professor Slobodan Ćurčić, Professor Ihor Ševčenko, and Mr. William Tronzo. Professor Noël Duval kindly made available his photograph of Dar el Kous at Kef. I am also grateful to Miss Frances Jones who redrew my reconstruction of the apse of St. Stephen for publication.
- <sup>1</sup> Laudatio Marciani, I.17-76 (St. Sergius) and II.28-54 (St. Stephen), ed. R. Förster and E. Richtsteig (Leipzig, 1929); French trans. F.-M. Abel, "Gaza au VIe siècle d'après le rhéteur Chorikios," RBibl, 40 (1931), 5-31; English trans. R. W. Hamilton, "Two Churches at Gaza, as Described by Choricius of Gaza," PEFQ, 1930, pp. 178-91; and C. Mango, The Art of the Byzantine Empire 312-1453 (Englewood Cliffs, N.J., 1972), 60-72.
  - <sup>2</sup> Laud. Marc., II.41-45.
- <sup>3</sup> A brief suggestion for reconstructing the appearance of the vault is offered by Abel, op. cit., 25 note 1, 27; a more detailed reconstruction is found in E. Baldwin Smith, The Dome (Princeton, 1950), 38–39, to which G. Downey contributed an appendix (pp. 155–57) with an annotated translation of Laud. Marc., II.37–46; the most recent discussion is by Mango, op. cit., 71 note 87.

also complained that "His carefully chosen diction does not always keep to the legitimate sense of the words. For sometimes through the excessive turning of his tropes he falls into a frigid phraseology, and in places he is swept into a style that is overly poetic." By and large the modern critic must concur with the judgment of the ninth-century Byzantine. The style of Choricius is indeed often overly ornate and hard to follow. On the other hand, his descriptions are of surpassing value because there is every reason to believe that they were accurate, and that Choricius painstakingly observed the buildings about which he spoke. In the case of the pictorial decoration of St. Sergius, comparisons with surviving sixth-century works of art have demonstrated that Choricius meticulously recorded the iconography of the Gospel scenes, even down to such details as the gestures made by the actors. Here I hope to show that for the history of architecture, too. Choricius can yield very precise and specific information once his rhetorical code has been deciphered.

The description of St. Stephen takes up almost a third of the second panegyric which Choricius composed in praise of Bishop Marcian of Gaza, who was presumably responsible for the construction of the church. Choricius probably delivered this oration after 535/36, and certainly before the death of the Empress Theodora in 548.6 Several

- 4 'Η δέ γε λέξις αὐτῷ τῶν λογάδων οὖσα ἐν πολλοῖς οὐκ ἀεὶ τὸ γνήσιον διώκει ἔσθ'ὅτε γὰρ διὰ τὴν ἄκρατον τῆς τροπῆς ἐκτροπὴν εἰς ψυχρολογίαν ἐκπίπτει καὶ πρὸς τὸ ποιητικώτερον δὲ ἔστιν οὖ παρασύρεται. Χρήσιμος δὲ ἔστιν αὐτὸς ἑαυτοῦ μᾶλλον ἐκφράσεις καὶ ἐγκώμια διεξερχόμενος. Bibliotheca, cod. 160, ed. R. Henry, II (Paris, 1960), 122.
- <sup>5</sup> See H. Maguire, "Truth and Convention in Byzantine Descriptions of Works of Art," *DOP*, 28 (1974), 118–19.
- <sup>è</sup> C. Kirsten, Quaestiones Choricianae, Breslauer philologische Abhandlungen, VII (1894), 13-15; W. Schmid, "Chorikios," RE, III,

features of the church of St. Stephen emerge clearly from the description, and since they have not been disputed by previous commentators, they may be listed without further discussion. The church was a basilica with a nave flanked on each side by an aisle surmounted by a gallery.7 At its eastern end opened an apse. Sumptuous revetments embellished the apse wall, in the center of which was a window framed in marble. Choricius says that a band (ζώνη) of the same kind of marble lay above the window; here he was presumably referring to the cornice at the top of the wall.8 In the course of his description of the apse Choricius also says that "on either side" were images, one of John the Baptist on the spectator's left, and one of him "who holds the church" on the right.9 Here there have been differences of interpretation, for F.-M. Abel and Cyril Mango identified the latter personage as the invisible patron of the church, St. Stephen, 10 while Glanville Downey opted for the visible patron, the building's donor.11 Moreover, Abel and Mango placed the two figures on the triumphal arch, while Downey put them in the semidome of the apse.

Immediately after Choricius' description of the apse comes the passage on the wooden vault: "On one band (¿ώνη), I speak of the highest, is placed a novel form. In geometry I have heard this called the half cone..."

After explaining through a mythological

reference that geometry borrowed the term from the shape of the pinecone, the orator continues: "A carpenter has cut five circles of the material given to him by his craft [i.e., wood] each equally into two, and has joined together nine of the segments to each other by their tips, but by their middles to the band which I have just called the highest. On these he has set an equal number of concave pieces of wood, which begin broad from below, but taper gradually to a sharp point, curving sufficiently to fit the concavity of the wall. And drawing together the tips of all the pieces into one and gradually bending them, he has produced a most pleasing sight. But while I have cut five circles in half, I have described the function of only nine of the segments, and am aware that you are naturally asking about the remaining part of the circle. This part, then, has itself been divided into two halves, and one being placed on one side and one on the other side of the nine, upon the two of them is placed an arch of the same material. hollowed out in front, and contributing additional beauty, an image of the Ruler of all things being painted in its center. Gold and colors make the whole work bright."13

In his commentary on this passage Abel suggested that Choricius was here describing the semidome over the eastern apse, which was adorned by a wooden construction with gores converging toward the top. But Abel's solution did not convince later commentators, since he did not attempt to explain the

col. 2425. The terminus post quem of 535/36 given by Kirsten and Schmid for the second panegyric addressed to Marcian is based on the eulogy of Duke Aratius and Governor Stephen. In the latter speech, delivered in or shortly before 536, Choricius praised recent constructions in Gaza, in particular the building of St. Sergius by Marcian, but did not mention St. Stephen.

<sup>&</sup>lt;sup>7</sup> See especially Laud. Marc., II.46-48.

<sup>8</sup> Ibid., 37, 39.

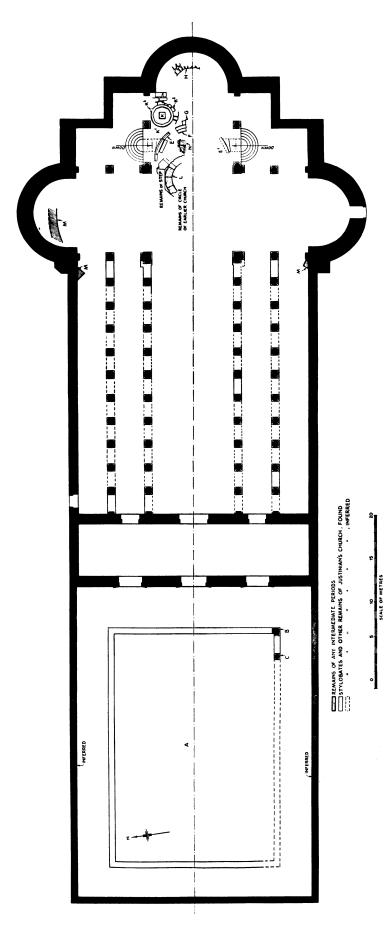
 $<sup>^9</sup>$  Έστι  $\langle \delta' \rangle$  άμφοτέρωθεν όσίων άνδρῶν συνωρίς, ἐκάτερος τὰ συνήθη σύμβολα φέρων, ὁ μὲν τὸ τέμενος ἔχων ἐν δεξιᾳ τοῖς θεωμένοις, παρὰ δὲ τὴν λαιὰν τὸν Πρόδρομον ὄψει. Ibid., 38.

<sup>10</sup> Abel, op. cit., 24 note 7; Mango, op. cit., 70 note 84. Mango argues cogently that the absence of St. Stephen would be surprising.

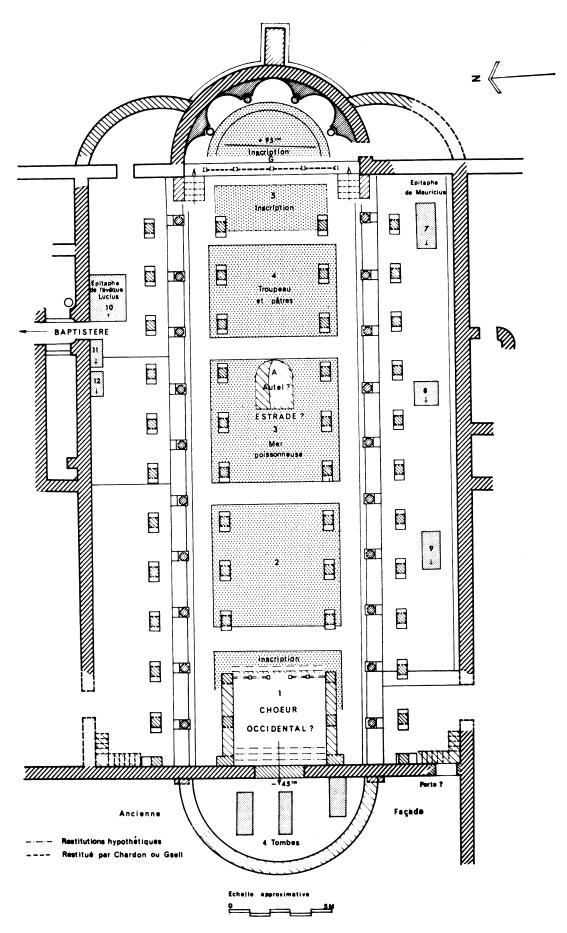
<sup>&</sup>lt;sup>11</sup> G. Downey, Gaza in the Early Sixth Century (Norman, 1963), 136.

 $<sup>^{12}</sup>$  Μιζ ζώνη, την ὑπερτάτην φημί, καινὸν ἐπίκειται σχῆμα. κῶνον ἡμίσεα τοῦτο καλούσης γεωμετρίας ἀκήκοα.... $Laud.\ Marc.$ , II.41.

<sup>13 &#</sup>x27;Ανήρ ξύλων δημιουργός κύκλους έξ ής αὐτῷ δέδωκεν ύλης ή τέχνη πέντε τὸν ἀριθμὸν ἔκαστον ίσα δύο τεμών καὶ τῶν τμημάτων ἐννέα συνάψας ἐκ μὲν τῶν ἄκρων ἀλλήλοις, ἐκ δὲ τῶν μέσων τῆ ζώνη ην άρτίως ύπερτάτην προσείπον ἰσάριθμα τούτοις ἐπέστησε ξύλα κοιλάνας κάτωθε μέν ἐξ εύρέος άρξάμενα, κατά βραχύ δὲ μειούμενα πρός άκρον όξὺ κυρτούμενά τε τοσοῦτον όσον τῆ κοιλότητι συναρμόσαι τοῦ τοίχου καὶ τὰς ἀπάντων κορυφάς είς μίαν συναγαγών ήρέμα τε κάμψας ήδιστον ἀπέδειξε θέαμα. άλλὰ γὰρ πέντε μὲν κύκλους δίχα τεμών, ἐννέα δὲ μόνον τμημάτων ὑπογράψας τὴν ἐργασίαν ἐπιζητοῦντας ὑμᾶς εἰκότως αίσθάνομαι τὸ λεῖπον μέρος τοῦ κύκλου. αὐτοῦ τοίνυν τοῦ μέρους έξίσης διηρημένου και τοῦ μέν ἔνθεν, τοῦ δὲ ἔνθεν τῶν ἐννέα κειμένου άψὶς άμφοτέροις ἐκ τῆς αὐτῆς ὕλης ἐπίκειται τὰ πρόσω κοιλαινομένη συνεισφέρουσα κάλλους προσθήκην είκόνος αύτῆ γεγραμμένης ἐν μέσω τοῦ προστάτου τῶν όλων. χρυσός δὲ καὶ χρώματα τὸ πᾶν ἔργον φαιδρύνει τοῦτο. Ibid., 43-45.



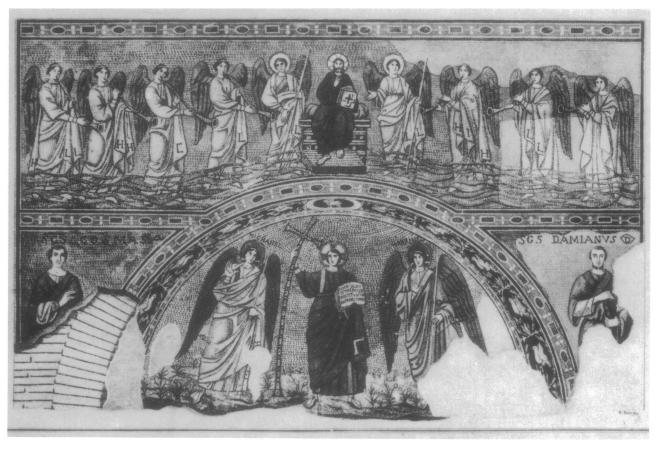
1. Bethlehem, Church of the Nativity. Plan



2. Rusguniae, Basilica. Plan



3. Tunisia, Kef, Dar el Kous, Apse



4. Ravenna, S. Michele in Affricisco, Triumphal Arch

precise arrangement of the nine semicircles, nor of the two remaining quarter circles.14 A detailed explanation of these features was subsequently provided by Smith and Downey, who argued that the nine half-circles formed the ribs of a dome, while the two quartercircles indicated the profiles of two supporting semidomes. Thus, while Abel had cut the cone in half vertically to make an apse, Smith and Downey truncated it horizontally to create a wooden dome.15 This dome "consisted of nine sections ... whose panels were curved out like a pine cone before they came together at the top in a point." The central dome "was flanked on either side by supporting half-domes of wood which theoretically did have the vertical section of a quarter-circle." Thus Smith proposed that the church of St. Stephen was similar in plan to the Justinianic basilica of the Nativity at Bethlehem, which had an east end with three apses arranged in a trefoil (fig. 1).16 As for the image of Christ the Ruler of all things, Downey believed this was a sixthcentury mosaic of Christ Pantocrator which filled the cupola.17

The interpretation given by Smith and Downey should be rejected for several reasons. First, the passage on the pinecone immediately follows Choricius' description of the marble revetments of the apse wall; it is, therefore, more natural to assume that Choricius is describing the apse vault rather than any other. Second, in another passage of his ekphrasis Choricius lists the architectural elements which combine to make up the height of the church, but he does not include a dome. He says: "Let us now figure the height of the roof of the church from the ground. High columns, an architrave joining their capitals, a wall above it faced with marble, [a] second [row of] columns, a second layer of stones, decorated with animal figures, arched windows, all these make up the height."18 If a cupola had been the crowning feature of the building, it should surely have been included in such a catalogue. Third, the reconstruction of the vault as a dome involves an awkward switch from actual structural components to metaphors: the nine semicircles are to be interpreted as the ribs of the dome, while the remaining semicircle, divided into two quarter circles, has to be taken metaphorically to indicate the profile of the supporting semidomes.<sup>19</sup> This must be an unnecessarily complicated conceit. even for Choricius. Furthermore, it is incorrect mathematically, as it leaves out the third semidome of the triapsidal east end which Smith and Downey proposed. Finally, if the quadrants are interpreted metaphorically as the profiles of the semidomes, it is hard to visualize what Choricius means when he says that "an arch ... hollowed out in front" was placed upon them.

The most recently published interpretation of the text, by Cyril Mango, rightly rejects the thesis that the vault was a dome, and returns to Abel's suggestion that it was the semidome of the apse. Mango further proposes that the nine half-circles were the ribs, and that since they were joined to each other by their tips "they were disposed like an accordion." However, he admitted that he was not able to account for the two wooden quadrants, nor for the "hollowed out" arch which they supported.<sup>20</sup>

The solution proposed here is that the wooden vault did indeed cover the apse. But if we are to account for all of the features recorded by Choricius, we must restore the vault as a pumpkin or melon dome cut precisely in half. This reconstruction can be visualized with the aid of the sixth- or early seventh-century apse of the church of Dar el Kous at Kef in Tunisia, where the pumpkin vault still stands (fig. 3).<sup>21</sup> At Gaza there

<sup>14</sup> Abel, op. cit., 25 note 1, 27.

<sup>15</sup> Smith, op. cit. (note 3 supra), 39, 156.

<sup>16</sup> Ibid., 39, fig. 156. For the plan, see E. T. Richmond, "The Church of the Nativity; Justinian's Alterations," QDAP, 6 (1936-37), fig. I.

<sup>&</sup>lt;sup>17</sup> Smith, op. cit., 157 note 24; Downey, op. cit., 138.

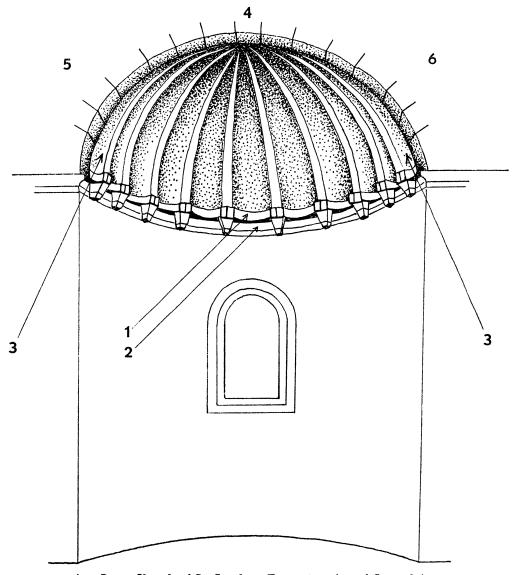
<sup>18</sup> Τοῦ νεὼ δὲ τὸ στέγος, φέρε, συλλογισώμεθα

πόσον ὑπεραίρει τῆς γῆς. κίονες ὑψηλοί, σύνδεσμος αὐτοῖς ἐπιζευγνύων τὰς κορυφάς, τοῖχος ἐπι τούτω μαρμάροις ἡμφιεσμένος, κίονες ἔτεροι, λίθων ἐτέρα προσθήκη θηρίων πεποικιλμένη μορφαῖς, θυρίδες ἐν ἀψίδων γενόμεναι σχήματι, ταῦτα πάντα τὸ ὑψος ἐστίν. Laud. Marc., II.48.

<sup>&</sup>lt;sup>19</sup> Smith, op. cit., 157 notes 18 and 23.

<sup>&</sup>lt;sup>20</sup> Mango, op. cit., 71 note 87.

<sup>&</sup>lt;sup>21</sup> N. Duval, "Les Eglises d'Haïdra, III. L'église de la citadelle et l'architecture byzantine en Afrique," *CRAI*, 1971 (hereafter Duval, "Haïdra"), 161, figs. 13 and 18.



A. Gaza, Church of St. Stephen. Reconstruction of Central Apse

were nine concave segments, or gores, which rose from semicircular bases (fig. A1) resting on the cornice of the apse wall ("the highest band") (fig. A2), and which tapered to sharp points at the crown of the apse. The nine semicircles formed the scalloped lower border of the vault and were thus joined to each other by their tips, while at their middles they were connected to the cornice. The elements of Choricius' description which have caused most difficulty to commentators are the two quarter-circles placed on either side of the nine half-circles, and the arch which they supported. The explanation for these features is provided by another North

African church, the basilica of Rusguniae, or Matifou, in Algeria. The building has been almost completely destroyed, but excavation revealed an apse with a groundplan composed of three semicircular niches flanked by two quadrants (fig. 2).<sup>22</sup> It seems likely that this apse was covered by a pumpkin-shaped vault with a scalloped base, as was the apse at Kef. In the vault at Matifou, then, three concave segments rose over the semicircles, while on the quadrants flanking the entrance of the apse were two curved half-segments producing

<sup>22</sup> For the plan, see idem, Les Eglises africaines à deux absides, II (Paris, 1973), 21-28, fig. 11; see also idem, "Haïdra," 161-64, fig. 19.

the effect of an "arch... hollowed out in front." The apse vault of St. Stephen's basilica must have been similar, except that it had a greater number of segments. Presumably at Gaza the wooden semidome was framed by a triumphal arch of masonry, against which the two half-segments abutted (fig. A 3).

The North African churches may help us to visualize the embellishments of the lower part of the apse in the church at Gaza. At Matifou the curved segments at the base of the semidome rose above niches hollowed in the apse wall, while between the niches colonnettes supported the projecting ribs of the vault. At Kef the bases of the ribs now overhang the wall below (fig. 3), but originally they too were supported on colonnettes which were set against the apse wall.28 A similar arrangement existed in the Citadel Church of Haïdra in Tunisia, a Byzantine building which also had a pumpkin-shaped semidome over its apse.24 It is possible that at Gaza, also, the ribs of the vault were carried on columns, for Choricius may refer to such supports in his ekphrasis. After describing the marble revetments of the apse wall. Choricius remarks that "... painters ... if they should be looking for columns or beautiful plaques to copy ... will find plenty of good models here."25 However, there is an objection to this interpretation of the text. Unless St. Stephen had a large apse, a ring of ten columns would have left little room for the central window, which Choricius specifically says was "wide and tall in proportion."26 Because the basilica of St. Stephen boasted galleries and probably a clerestory, the apse could conceivably have been wide enough to accommodate both the ten columns and a window in its center.27 But we can also argue that when Choricius invited painters to use the columns as models he may have had the whole church in mind, rather than the apse alone. If this was the

case, the apse wall could have been adorned with an essentially flat decoration of marble plaques, while the ribs of the light wooden semidome were carried either on corbels or simply on the thickness of the wall itself.

Choricius tells us that the east end of the church displayed images, but unfortunately the orator does not allow us to decide with certainty whether these were true paintings or mosaics.28 However, if the reconstruction of the "half-cone" vault which I propose here is accepted, it can help us to determine with more confidence the pictures' precise location. I have suggested that the opening of the apse vault at Gaza was flanked by two curved wooden gores which produced the effect of an "arch ... hollowed out in front." The image of the "Ruler of all things," which Choricius says was painted in the center of this arch, must have been at the summit of the triumphal arch against which the two wooden gores abutted (fig. A4). To an observer looking into the apse, an image painted at the apex of the triumphal arch would have appeared to be in the center of these two gores which framed the semidome. The portrayals of John the Baptist and of the patron, which Choricius says were placed "on either side," cannot have been represented on the vault of the apse, as Downey believed, because a composition of two figures would have fitted very awkwardly onto a surface divided into nine concave segments. The two figures must have been placed on either side of the triumphal arch, flanking the picture of Christ at the top, as Abel originally supposed (fig. A5 and 6). The arrangement would, then, have been analogous to that of the contemporary mosaics on the triumphal arch of S. Michele in Affricisco at Ravenna. where Christ the Ruler is enthroned at the top of the arch, while SS. Cosmas and Damian occupy the spandrels on either side (fig. 4).29 Because Choricius mentions no other

<sup>&</sup>lt;sup>23</sup> Idem, "Haïdra," 161, fig. 18.

<sup>&</sup>lt;sup>24</sup> *Ibid.*, 150–52, figs. 7, 8, 12.

<sup>25</sup> ἄστε καὶ ζωγράφων παϊδες...εἴ που δέοιντο κιόνων εἰς μίμησιν ἢ πλακῶν ἀγλαίας...καλῶν εὐπορήσουσιν ἐντεῦθε παραδειγμάτων. Laud. Marc., II.40.

 $<sup>^{26}</sup>$  ...εὐρεῖαν ὁμοῦ καὶ πρὸς τὸ πλάτος εὐμήκη θυρίδα....  $Laud.\ Marc.,\ II.39.$ 

<sup>&</sup>lt;sup>27</sup> Ibid., 48 (see supra, note 18).

<sup>&</sup>lt;sup>28</sup> In his summary at the end of the *ekphrasis*, Choricius specifically mentions both paintings and mosaics, but he does not tell us whether the mosaics were on the walls or the floor; *Laud. Marc.*, II.53.

<sup>&</sup>lt;sup>29</sup> F. W. Deichmann, Ravenna. Hauptstadt des spätantiken Abendlandes, I. Geschichte und Monumente (Wiesbaden, 1969), 220–25, figs. 211–12; ibid., II, Kommentar, pt. 2 (1976), 38–43, fig. 1.

figures, we may conclude that the decoration of bright gold and colors which he saw on the vault of the apse was aniconic.30

There remains the question of why Choricius uses the term "half-cone" in his description of the vault. The gored domes of Hadrianic architecture had already been described as pumpkins (κολοκύντας) by Cassius Dio in his report of the dispute between the emperor and the architect Apollodorus.<sup>31</sup> Abel suggested that Choricius may have compared the semidome to a pinecone because the vault had a decoration of imbrications.32 But as Choricius specifically calls the "half-cone" a geometrical term, it is more likely that it refers to shape rather than to surface ornament. Mango proposed that the semidome of the apse "may have been slightly pointed at the top so as to suggest the form of a cone cut vertically in half."33 A famous letter of the fourth century lends some weight to this interpretation. When St. Gregory described to Amphi-

30 To my knowledge, the only early medieval pumpkin vault which still retains traces of its original decoration covers the east apse of the crypt of St-Oyand beneath St-Laurent at Grenoble. This vault is divided into three segments which were adorned with painted stucco reliefs. The stuccoes in the central segment portrayed a cross flanked by rinceaux, while each side segment was decorated with symmetrical scrolls of foliage; see J. Hubert, "La 'Crypte' de Saint-Laurent de Grenoble et l'art du sud-est de la Gaule au début de l'époque carolingienne," Arte del Primo Millennio, Atti del IIº Convegno per lo studio dell' Arte dell' Alto Medio Evo (Pavia, 1950) 327-34, esp. 330, figs. 198-99. According to Hubert the crypt was constructed at the end of the eighth century: ibid., 332. However, G. Gaillard, "Un édifice des temps barbares: la Chapelle Saint-Oyand à Saint-Laurent de Grenoble," Bracara Augusta, 9-10 (1958-59), dated the crypt to the sixth or seventh century. According to the recent investigation by R. Girard, the interior plan of the present crypt dates back to the sixth century, but the building was extensively restored in the Carolingian period; "La Crypte et l'église Saint-Laurent de Grenoble," Congrès archéologique de France, 130 (1972), 243-63, esp. 260.

31 Cassius Dio, LXIX.4,1-2. This passage is discussed in R. E. Brown, "Hadrianic Architecture," in Essays in Memory of Karl Lehmann, ed. L. F. Sandler (New York, 1964), 55-58.

lochius, bishop of Iconium, the martyrium which he planned to build at Nyssa, he referred to the top of his church as a pinecone (στρόβιλος). Whatever may have been the precise shape of this superstructure, which covered an octagonal space, it is clear from St. Gregory's description that it came to a sharp point.<sup>84</sup> However, it is difficult to accept that the apse vault of St. Stephen was also pointed at the summit. In surviving sixth-century churches, even if the apse arches are not always true semicircles, they almost invariably have rounded tops, like that at Kef. It is more likely that the term "half-cone" refers not to the shape of the whole vault but to the shapes of its nine segments. Choricius visualized each segment. with its semicircular base, as an oblique cone which had been cut vertically in half and bent to conform to the curvature of the vault.35

My interpretation of the "half-cone" bears upon another difficult passage in Choricius' description of the church of St. Stephen. Referring to the two side aisles, Choricius says: "Since each of the colonnades should also have some distinction at its east end, but they should not have as much as the middle, they are adorned with the rest of the forms apart from the intricacy given by the cones which I have described."36 Here Mango comments that "Choricius may be trying to say that the two colonnades did not have any special feature at their eastern end such as exedras covered by half domes ('cones')."37 However, if by "cones" Choricius means

34 τὸ δὲ ἀπ'ἐκείνου στρόβιλος ἔσται κωνοειδής, τῆς εἰλήσεως τὸ σχῆμα τοῦ ὀρόφου ἐκ πλατέος είς όξὺν σφῆνα κατακλειούσης. Ερ. XXV.6, ed. G. Pasquali (Leiden, 1959), 80; translation in Mango, op. cit., 28. On the reconstruction of Gregory's church, see J. Strzygowski, Kleinasien. Ein Neuland der Kunstgeschichte (Leipzig, 1903), 74-90, fig. 63 (includes a contribution by B. Keil); A. Birnbaum, "Die Oktogone von Antiochia, Nazianz und Nyssa," RepKunst, 36 (1913), 202-9.

35 Apollonius of Perga terms the oblique cone κῶνος σκαληνός; Conica, I, Def. I.3, ed. I. L. Heiberg (Leipzig, 1891).

36 έπεὶ δὲ καὶ τῶν στοῶν ἐκατέραν ἔδει μέν τινος μετασχείν ευπρεπείας κατά την πρός έω πλευράν, έδει δὲ μή τοσαύτης όσης τὸ μέσον, ἄνευ τῆς ἐκ τῶν κώνων εἰρημένης μοι ποικιλίας τοῖς λοιποῖς ώρατιονται σχήμασιν. Laud. Marc., II.46. 37 Mango, op. cit., 71 note 89.

<sup>32</sup> Abel, op. cit. (note 1 supra), 25 note 1.

<sup>33</sup> Mango, op. cit. (note 1 supra), 71 note 87.

the segments of a pumpkin vault his text becomes easier to understand. What Choricius says is that the side aisles are not terminated by pumpkin vaults, but since they "should also have some distinction... they are adorned with the rest of the forms" which he had just described at the center of the east end. The implication is that the ends of the side aisles also had apses decorated with colored marble revetments but covered by plain, unscalloped semidomes.

To sum up, the *ekphrasis* of St. Stephen, complicated though it is, gives us valuable information about the east end of this Justinianic church. The basilica had three

apses, of which the outer two had smooth semidomes, while the central apse was covered by a wooden vault in the shape of half a pumpkin dome. Choricius is less specific about the decoration of the east end than about its structure, but it is clear that the program of images had to be presented on the triumphal arch, since the apse was scalloped. The wooden "half-cone" vault was evidently unusual, for Choricius in the first sentence of his description terms it a "novel form"—a feature which deserved the most intricate exercise of his rhetorical arts.

**Dumbarton Oaks**